

APPLICATION FOR PERMIT  
TO APPROPRIATE THE PUBLIC WATERS OF THE STATE OF NEVADA

Date of filing in State Engineer's Office JUN 8 1987

Returned to applicant for correction

Corrected application filed

Map filed DEC 20 1983 under 47366

The applicant Geothermal Development Associates

251 Ralston St., of Reno,  
Street and No. or P.O. Box No. City or Town

Nevada 89503, hereby make application for permission to appropriate the public  
State and Zip Code No.

waters of the State of Nevada, as hereinafter stated. (If applicant is a corporation, give date and place of incorporation; if a copartnership or association, give names of members.) November 28, 1978, Nevada

1. The source of the proposed appropriation is ground water  
Name of stream, lake, spring, underground or other source

2. The amount of water applied for is 1.0 second-feet  
One second-foot equals 448.83 gals. per min.

(a) If stored in reservoir give number of acre-feet

3. The water to be used for Industrial Purposes (geothermal power generation)  
Irrigation, power, mining, manufacturing, domestic, or other use. Must limit to one use.

4. If use is for:

(a) Irrigation, state number of acres to be irrigated

(b) Stockwater, state number and kinds of animals to be watered

(c) Other use (describe fully under "No. 12. Remarks") geothermal power generation

(d) Power:

(1) Horsepower developed

(2) Point of return of water to stream

5. The water is to be diverted from its source at the following point From a well within the NE 1/4 SE 1/4 of  
Describe as being within a 40-acre subdivision of public

Sec. 29, T 18 N., R. 20 E., M.D.M., Nev. on a tangent 1311.00', bearing N 14 37'  
survey, and by course and distance to a section corner. If on unsurveyed land, it should be so stated.

00'E, to the East 1/4 corner of said Sec. 29.

6. Place of use Portions of SE/4 NE/4 SE/4 Sec. 29 T. 18 N., R. 20 E., M.D.B. & M.,  
Describe by legal subdivision. If on unsurveyed land, it should be so stated.

Nevada

7. Use will begin about January 1 and end about December 31, of each year.  
Month and Day Month and Day

8. Description of proposed works. (Under the provisions of NRS 535.010 you may be required to submit plans and specifications of your diversion or storage works.) Existing well, pump and motor (PW-2)  
State manner in which water is to be diverted, i.e. diversion structure, ditches and

flumes, drilled well with pump and motor, etc.

9. Estimated cost of works -0-

10. Estimated time required to construct works well completed; described under Proof of  
If well completed, describe works.  
Completion of Work, permit #47369

11. Estimated time required to complete the application of water to beneficial use three years

12. Remarks: For use other than irrigation or stock watering, state number and type of units to be served or annual consumptive use.

This well will be one of two or more geothermal production wells having a total diversion of up to twelve (12) cfs; consumptive use will be about 1.6 cfs in the power plant evaporative cooling system (1065 ac-ft per year); the balance (10.4 cfs) will be reinjected into the geothermal reservoir by means of injection wells. Please use map filed under permit #47366.

By s/ G. Martin Booth  
GEOTHERMAL DEVELOPMENT ASSOCIATES  
s/ G. Martin Booth III  
251 Ralston St.  
Reno, NV 89503

Compared pm/bc ab/se

Protested \_\_\_\_\_

APPROVAL  
OF STATE ENGINEER

This is to certify that I have examined the foregoing application, and do hereby grant the same, subject to the following limitations and conditions:

This permit is issued subject to existing rights. It is understood that the amount of geothermal fluid herein granted is only a temporary allowance and that the final right obtained under this permit will be dependent upon the amount actually placed to beneficial use. It is also understood that this right must allow for a reasonable decrease of fluid pressure and heat. The well shall be equipped and maintained to prevent any waste of the geothermal fluid. Accurate measurements must be kept of discharge of the production well and the amount of fluid injected into the injection well to determine the total amount of fluid diverted and consumed for a beneficial use.

The production and injection wells are to be cemented from the producing levels to the surface to protect fresh water zones. This permit is issued subject to the condition that only geothermal fluids are to be diverted and used beneficially for heating purposes and fresh, cold water aquifers are not to be diverted. The used geothermal fluids are to be returned to the source via the injection well. The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies. A detailed log on the (CONTINUED ON PAGE 2)

The amount of water to be appropriated shall be limited to the amount which can be applied to beneficial use, and not to exceed 1.0 cubic feet per second.

Work must be prosecuted with reasonable diligence and be completed on or before June 16, 1994

Proof of completion of work shall be filed on or before July 16, 1994

Application of water to beneficial use shall be made on or before June 16, 1995

Proof of the application of water to beneficial use shall be filed on or before July 16, 1995

Map in support of proof of beneficial use shall be filed on or before N/A

Completion of work filed SEP 02 1994 IN TESTIMONY WHEREOF, I, R. MICHAEL TURNIPSEED, P.E.

Proof of beneficial use filed \_\_\_\_\_ State Engineer of Nevada, have hereunto set my hand and the seal of my office, this 21st day of May

Cultural map filed \_\_\_\_\_

Certificate No. \_\_\_\_\_ Issued \_\_\_\_\_ A.D. 19 93

*[Signature]*  
 State Engineer

## (PERMIT TERMS CONTINUED)

injection well and/or other analyses of the system used for returning the used geothermal fluids to the source must be submitted together with the Proof of Completion.

The total withdrawal of the geothermal fluid under Permits 47367, 47368, 47369, 51007, 51008 and 51009 shall be limited to 7963 acre-feet per year but the total consumptive use of the geothermal fluid is limited to only incidental fluid losses in the system and in no case shall it amount to more than 579 acre-feet annually. The State Engineer does not waive the right to make a determination of incidental fluid losses at any time and impose additional conditions thereto. This permit is further issued subject to the provisions of NRS 533.372(1) and with the understanding that the power or energy generated by the beneficial use of this water or steam is subject to recapture and use within the boundaries of the State of Nevada when the need arises.

The total combined diversion rate under Permits 47367, 47368, 47369, 51007, 51008 and 51009 shall be limited to 11.0 cubic feet per second.

Monthly records for this well shall be kept of the amount of geothermal fluid diverted, injected and consumed to a beneficial use and the records submitted to the State Engineer on a quarterly basis within 15 days after the end of each calendar quarter.

This permit does not extend the permittee the right of ingress and egress on public, private or corporate lands.

The issuance of this permit does not waive the requirements that the permit holder obtain other permits from State, Federal and local agencies.

